

REMARKS

The Applicant would like to thank Examiner Nguyen for the courtesy of a phone interview on September 21, 2007 where Examiner Nguyen agreed to withdraw the 35 U.S.C. § 101 rejection.

Claims 1-12, 24-25, and 27-39 remain in the application. Claims 34-39 are newly added but do not add any new matter.

The Office Action rejected Claims 1, 2, and 4 under 35 U.S.C. § 112. Applicant has amended Claims 1 and 2 to overcome the rejection.

The Office Action stated that the limitation of “a state data” lacked sufficient antecedent basis in lines 6 and 8 of Claim 2. However, Applicant could not find “a state data” but only “a state data administrating part” and “a state data delivering part” which is different from “a state data.”

Furthermore, the Office Action stated that Claim 4, line 7 recited “if” which should be replaced with “when.” Applicant could not find the word “if” in Claim 4, but has amended Claim 8 instead to replace the word “if” with the word “when.”

Applicant therefore respectfully requests that the 35 U.S.C. § 112 rejection be withdrawn.

The present invention is directed towards an information processing system for collecting and administrating data pertaining to conditions that promote the culture of plants and other biological organisms, the treatment and alleviation of unwanted symptoms or stress in living organisms, and collecting and administrating data that pertains to the creation and maintenance of optimal environmental conditions. (Pg. 1, lns. 7 – 11). It accomplishes this by controlling and monitoring environmental controlling means X, environmental measuring means Y, state measuring means Z on a biological organism such as a plant. (Fig. 4) By controlling and

monitoring environmental controlling means X, environmental measuring means Y, state measuring means Z on a biological organism such as a plant, the present invention can detect parameters that favor the culturing of particular living organisms and disclose such parameters once payment for such a discovery has been secured. (Pg. 2, ln. 25 – Pg. 3, ln. 4). This allows a user to obtain royalty for producing valuable data which encourages users to share and provide valuable data. Thus, data which may ordinarily be held secretly can now be shared and/or disclosed. (Pg. 3, ln. 4 – 23). This improves the flow of information and will help to enhance the discovery of useful procedures for enhancing and promoting the growth of biological organisms.

The Office Action rejected Claims 1, 2, 5, and 8-25 under 35 U.S.C. § 102(b) as being anticipated by *Lys et al.* (U.S. 6,577,080). Applicant has amended Claim 1 to incorporate the features of Claim 14 and Claim 26. The Office Action provided no rejection for Claim 26.

[T]he dispositive question regarding anticipation is whether one skilled in the art would reasonably understand or infer from the prior art reference's teaching that every claim [limitation] was disclosed in that single reference.

Dayco Prods., Inc. v. Total Containment, Inc., F.3d 1358, 1368 (Fed. Cir. 2003).

Lys is directed towards a pulse width modulated current control for a lighting assembly such as an LED system or LED lighting assembly. (Col. 5, lns. 25 – 42).

Lys does not teach or suggest “an environmental data receiving part that receives relevant environmental data which is data concerning an environment of the living organism including the light irradiated on the living organism from the first controlling system.” The Office Action cited to Column 3, lines 18-21 and Column 62, lines 29-31 in *Lys* for the features of the present invention. However, *Lys* teaches illuminating a biological entity and then monitoring the

illumination to provide feedback as to how the biological entity is illuminated, but does not teach providing illumination on a biological entity and then monitoring the illumination on the biological entity to ensure that there is a desirable amount of illumination on the biological entity. Causing an object to illuminate like causing an object to glow is not the same thing as providing an illumination on an object. For example, a light bulb can be illuminated by turning it on such that it glows, but providing an illumination on the light bulb could include placing a candle adjacent the light bulb. Thus, *Lys* teaches causing a biological organism to illuminate and monitoring the illumination of the biological organism, but does not teach collecting relevant data of light irradiating on the biological organism.

Lys also does not teach or suggest “a royalty data producing part that produces royalty data which is a value to be received in return for disclosing a proprietary environmental data produced by a first controlling system to the second controlling system, in relationship to a controlling system identifier that identifies the first controlling system when the proprietary environmental data is received or delivered.” The Office Action cited to Column 60, lines 9-13 for the features of the present invention. *Lys* only teaches that data received in sensor module 2050 can be used to evaluate features of a material. The output data can include values that can be compared to a set of known values using algorithms familiar to those skilled in the arts. The relationship between the output data and the set of known values can be determined so as to yield meaningful information about the material being illuminated by the illumination system. (Col. 60, lines 9 – 17). Meaningful information about the material being illuminated, however, is not the same as royalty data since royalty data pertains to payment such as how much the payment should be for disclosing the environmental data. There is no indication in *Lys* that it teaches producing royalty data with the royalty data being a value received in return for disclosing the

environmental data. *Lys* only discloses output data that can be compared with known values to determine if the output data is useful or not. Thus, there is no discussion of payment being received in return for actually transmitting the environmental data.

In contrast, the present invention connects individual who wishes to foster plant growth through a communication network and discloses or transmits environmental data held by such individuals to persons who request such environmental data upon the receipt of payment of an agreed-upon value amount. (Pg. 2, ln. 26 – Pg. 3, ln. 3).

Lys fails to recite “a request signal transmitting part that transmits a request signal to the information processing system requesting delivery of environmental data that is specified by an environmental data identifier.” The Office Action cites to Column 2, lines 57-60. However, *Lys* only discloses that data could be transmitted at 9600 bits per second or higher and not the target of the transmission signal or a specific content that is requested within the transmission signal.

In contrast, in the present invention, request signal transmitting part 210 transmits the delivery request signal of the environmental data together with the environmental data identifier to identify the environmental data to the central information processing system P3. (Pg. 13, lns. 10 – 13; Figs. 1, 4) As seen in Figure 7, the environmental data identifier is stored in the state data storing part D4 along with the data name, controlling system identifier, and plant identifier. (Pg. 14, lns. 12 – 17; Figs. 5, 7). As shown in Figure 8, the assessment data is stored the assessment data storing part D5 in relationship to the environmental data identifier. (Pg. 14, ln. 24 – Pg. 15, ln. 12)

Lys, also does not teach or suggest “an environmental data receiving part that receives the environmental data delivered by the information processing system.” *Lys* teaches a signal driver that sends 512 device codes in a continual, repetitive stream of data. The receiving device is

addressed with a number between 1 and 512 so it will respond only to data that corresponds to its assigned address. (Col. 3, Ins. 18 – 21) However, sending and receiving device codes is not the same as sending and receiving environmental data. There is no indication that device codes pertain to anything other than the ID of a single receiving device. More specifically there is no indication that the device codes pertain to the environment of a living organism including the light irradiated on the living organism.

In contrast, in the present invention environmental data is “data concerning an environment of the living organism including the light irradiated on the living organism from the first controlling system.”

Lys also does not recite, “a control means controlling part that controls one or multiple environment control means to control the environment of the living organism based on the environmental data.” *Lys* indicates that there is a significant problem with lighting networks in that they require special wiring or cabling and thus owners must undertake significant efforts to rewire the lighting in order to have a digitally controlled lighting environment. (Col. 4, Ins. 26-30). Thus *Lys* presents a problem, but there is no indication that *Lys* specifically discloses a solution that includes a central control system and more specifically one which controls the lighting for a living organism based on the environmental data.

However, in the present invention, control means controlling part 22 (1) obtains environmental data from the environmental data administrating part 29, (2) produces a controlling signal to control the environment controlling means X based on the obtained environmental data and (3) outputs the controlling signal to the environment controlling means X. The control means controlling part 22 may be an FF control based on the environmental data or an FB control with reference to the measured environmental data. (Pg. 11, Ins. 3-11). The

environment control means X can be driven by a controlling signal from outside and comprises a heater X4 or a window open-close mechanism to control temperature, a light irradiating means X1 to control irradiating light, a mist spraying mechanism X2 to control humidity, a CO₂ supplying mechanism X3 to control CO₂ concentration. (Pg. 7, lns. 15 – 25).

Lys also does not disclose “a measured environmental data receiving part that receives measured environmental data indicating measured values of the environment of the living organism from the environment measuring means that measures the relevant environment.” *Lys* only teaches a light sensor 719 that may detect changes in the external illumination conditions and send a signal 723 to one or more smart bulbs 701 to alter the illumination in an interior space 7256 to compensate for the external illumination conditions sensed by light 719. (Col. 41, lns. 51 – 56). If the sensor 719 is the measured environmental data receiving part then *Lys* does not disclose receiving the measured values from an environment measuring means since sensor 719 directly detects changes in the external illumination. Furthermore, if sensor 719 is the environmental measuring means, then *Lys* does not teach a measured environmental data that receives the measured values from sensor 719 since there is no indication that sensor 719 sends its data to any measure environmental data receiving part. (Col. 41, lns. 51 – 64; Fig. 73)

In contrast, in the present invention, the measured environmental data receiving part 24 receives measured environmental data showing a measured value of the plant culturing environment output by each environment measuring means Y and makes use of the input/output interface 107. (Pg. 10, lns. 6 – 10). As seen in Figure 4, environment measuring means Y can output measured data to outside and comprises a light intensity sensor Y1 that detects intensity of light irradiating plants, a humidity sensor Y2, a CO₂ concentration sensor Y3, a temperature sensor Y4, etc. (Pg. 7, ln. 27 – Pg. 8, ln. 2). Thus, through the use of measured environment

data receiving part 24, multiple values from multiple sensors can be used. This is advantageous when trying to determine novel and beneficial plant cultivation techniques.

Furthermore, with respect to Claim 1, the Office Action cites to various discrete disclosures within *Lys*, but fails to indicate how each of the disclosures combined would perform the function of the present invention.

An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention.

See In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 678, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

For example, the Office Action cites to illuminating a biological entity and monitoring the illumination such as making a biological entity glow as the environmental data. Causing a biological entity to glow is different than casting light on the biological entity. Even if they are the same, and there is no indication there is, the Office Action fails to explain how this feature relates to other features of the present invention.

The Office Action also cites to the feature of *Lys* that discloses that data can be transferred at 9600 bits per second as “a request signal transmitting part that transmits a request signal to the information processing system requesting delivery of environmental data that is specified by an environmental data identifier.” However, the Office Action does not explain how data about the biological entity is identified, where it is to be delivered, or how it can be delivered.

Furthermore, for the feature of “an environmental data receiving part that receives the environmental data delivered by the information processing system,” the Office Action cites to a

signal driver and a receiving device that is uniquely numbered but does not explain how it transfers the information regarding the illumination of the biological entity.

In addition, the Office Action cites to *Lys* for the recognition that is a problem with wiring for the feature of “a control means controlling part that controls one or multiple environment control means to control the environment of the living organism based on the environmental data.” The Office Action, however, fails to explain what relation problems with wiring has to do with biological illumination or how it could control biological illumination wirelessly.

The Office Action then cites to light sensor 719 for “a measured environmental data receiving part that receives measured environmental data indicating measured values of the environment of the living organism from the environment measuring means that measures the relevant environment.” The Office Action, however, does not explain how it comports environmental data which it now cites as external illumination conditions with the previous citation of environmental data as illumination of a biological entity, such as how much the biological entity glows.

With respect to Claim 2, *Lys* does not disclose “a state data receiving part that receives state data as being data concerning a state of the culture or cure of living organisms.” In *Lys*, there is no state data receiving part. *Lys* merely indicates that shining a certain color light for a period of time predetermined to be effective may produce a desired change. Thus, if a user has depressive syndrome, exposure to a certain amount of light with certain known characteristics may be beneficial to the user. However, there is no recitation in *Lys* that the depressive syndrome is detected by sensors, or that it is received or transmitted anywhere. *Lys* merely

teaches that the light may be manually set to have such beneficial characteristics once it is known that a user has depressive syndrome.

However, in the present invention, the state data in can be an image data output from the imaging means X1, weight data measured and input, or even analysis data showing sweetness of fruits, etc. (Pg. 12, ln. 24 – Pg. 13, ln. 5)

Lys also fails to disclose “a state data administrating part that administers the state data received by the state data receiving part.” The Office Action cites to Column 15, lines 7-10. However, *Lys* teaches that states of signal inputs 424, 444, and 464 directly correlate with the opening and closing of the power circuit through respective LED sets 121, 140, and 160. It does not teach adding, deleting, or outputting data in accordance with a request from outside in a predetermined mode. This is especially true considering that the Office Action cites to state data as the user having “depressive syndromes.” Since states of signal inputs 424, 444, and 464 directly correlate with the opening and closing of power circuits through respective LED sets 121, 140, and 160 they do not represent “depressive syndromes.”

In contrast, in the present invention, state data administrating part 36 administers the state data received by the state data receiving part 35 and the controlling system identifier of the first controlling system P2. (Pg. 14, lns. 9 – 17). Administer is to add, delete, update or output the data in accordance with a request from outside in a predetermined mode to the environmental data storing part D3 set at a predetermined area of the memory 102 or the external memory device 103. (Pg. 13, lns. 22 – 25).

The Office Action rejected Claims 3, 6, and 7 under 35 U.S.C. § 103(a) as being unpatentable over *Lys* (U.S. 6,577,080) in view of *Dodds* (U.S. Patent App. No. 2002/0022772).

Dodds is directed towards the testing, diagnosis, and prediction of disease and disorders of animal companions. (§ 0002). It accomplishes this by using genetic data and various biological data of an animal to generate a report including an evaluation of health, disease, and disorder probabilities and longevity of the animal. (Claim 1).

With respect to Claim 3, *Dodds* does not teach or suggest “a payment data obtaining part that obtains payment data concerning payment or a guarantee of payment in compensation for the environmental data delivered in accordance with a controlling system identifier that identifies the second controlling system requesting the environmental data.” *Dodds* only teaches displaying a biological report which indicates specimens of blood, urine, other body fluids, skin, eyes, skeletal and other tissues about a specific animal. (§ 0178). The report can be accessed once payment is secured. There is no indication in *Dodds* that it displays a report showing the environmental data once payment has been secured since *Dodds* does not measure the environment in which the animal resides in. *Dodds* teaches collecting biological samples from the animal instead of the animal’s environment and analyzes the data from the biological samples from the animal in exchange for payment.

In contrast, in the present invention, the environmental data may be a control program wherein a sequence is described in addition to, for example, a measured value or a target value to be controlled of the plant culturing environment (for example, light intensity or humidity and so on), or may be a combination thereof. (Pg. 9, ln. 25 – Pg. 10, ln. 6).

With respect to Claim 6, *Dodds* does not teach or suggest “an assessment data obtaining part that obtains assessment data showing assessment of uniqueness or effectiveness of the environmental data administered by the environmental data administering part.” *Dodds* only teaches displaying a biological report which indicates specimens of blood, urine, other body

fluids, skin, eyes, skeletal and other tissues about a specific animal. (§ 0178). There is no indication in *Dodds* that it displays a report showing the uniqueness or effectiveness of environmental data administered. This is particularly true since there is no indication in *Dodds* that it measures the environment in which the animal resides in. Instead it collects biological samples from the animal instead of the animal's environment and analyzes the data from the biological samples from the animal.

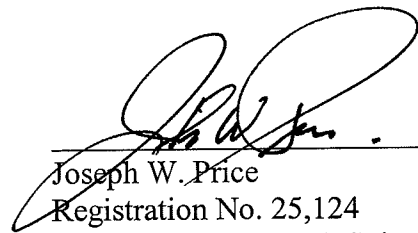
All arguments for patentability with respect to Claim 6 are repeated and incorporated herein for Claim 7.

Dependent claims 2-12, 24-25, and 27-38 depend from and further limit Independent Claim 1 and are thus allowable, too.

The application is believed in condition for allowance. If there are any questions with regards to this response, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

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